CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

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NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.10/KRIDL/CEMENT/2014-15

Date: 07.07.2014

TEST REPORT

CLIENT	:	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
AGENCY	:	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	:	Improvements to roads and drains at G. Krishnappa Layout in Ward No.10, BBMP, Bangalore.
REFERENCE	:	EE/BTP/KRIDL/W.O/470/2013-14 Dated: 21.02.2014
SAMPLE ID	:	CEMENT
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 1989-2013
1	Standard Consistency	IS-4031 (Part -4)	28.50 %	-
2	a) Initial Setting Time	IS-4031 (Part -5)	145 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	490 Minutes	Not More than 600 Minutes
3	Soundness by the Le-Chatelier method	IS-4031 (Part 3)	1 mm	Not more than 10 mm

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Job No.: CTCE/BBMP/W.No.10/KRIDL/SAND/2014-15 : 07.07.2014

TEST REPORT ON FINE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to roads and drains at G. Krishnappa Layout in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/W.O/470/2013-14 Dated: 21.02.2014

Date of Testing : 07.07.2014

Material : Sand Total Wt. of Aggregates in gms **1000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	50	5.00	5.00	95.0	90-100
2.36	190	19.00	24.00	76.0	75-100
1.18	195	19.50	43.50	56.5	55-90
600 Micron	185	18.50	62.00	38.0	35-59
300 Micron	198	19.80	81.80	18.2	8-30
150 Micron	130	13.00	94.80	5.2	0-10

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CTCE/BBMP/W.No.10/KRIDL/AGG/2014-15 : 07.07.2014

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : ***Technical Manager,*** *KRIDL, Bangalore.*

Name of Work : *Improvements to roads and drains at G. Krishnappa Layout in Ward No.10, BBMP,* Bangalore.

Reference : EE/BTP/KRIDL/W.O/470/2013-14 Dated: 21.02.2014

Date of Testing : 07.07.2014

Material : 40mm Aggregates

Total Wt. of Aggregates in gms **10000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	315	3.15	3.15	96.85	95-100
20	6000	60.00	63.15	36.85	30-70
10	2150	21.50	84.65	15.35	10-35
4.75	1400	14.00	98.65	1.35	0-5

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Job No.: CTCE/BBMP/W.No.10/KRIDL/CUBE/2014-15 07.08.2014

TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of the work	: Improvements to roads and drains at G. Krishnappa Layout in Ward No.10, BBMP, Bangalore.
Reference	: EE/BTP/KRIDL/W.O/470/2013-14 Dated: 21.02.2014
Sample ID	: Road Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	10.07.2014	07.08.2014	8.135	475.5	21.13
2	10.07.2014	07.08.2014	8.260	492.6	21.89
3	10.07.2014	07.08.2014	8.334	515.6	22.92

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TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of the work	: Improvements to roads and drains at G. Krishnappa Layout in Ward No.10, BBMP, Bangalore.
Reference	: EE/BTP/KRIDL/W.O/470/2013-14 Dated: 21.02.2014
Sample ID	: Road Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	12.07.2014	09.08.2014	8.135	478.5	21.27
2	12.07.2014	09.08.2014	8.298	490.6	21.80
3	12.07.2014	09.08.2014	8.340	502.6	22.34

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TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of the work	: Improvements to roads and drains at G. Krishnappa Layout in Ward No.10, BBMP, Bangalore.
Reference	: EE/BTP/KRIDL/W.O/470/2013-14 Dated: 21.02.2014
Sample ID	: Road Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	14.07.2014	11.08.2014	8.358	490.3	21.79
2	14.07.2014	11.08.2014	8.495	512.4	22.77
3	14.07.2014	11.08.2014	8.260	478.5	21.27

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TEST REPORT ON CONCRETE CUBES

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Agency : **Technical Manager,** KRIDL, Bangalore.

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Reference : EE/BTP/KRIDL/W.O/470/2013-14 Dated: 21.02.2014

Sample ID : Road Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	15.07.2014	12.08.2014	8.175	478.6	21.27
2	15.07.2014	12.08.2014	8.256	512.6	22.78
3	15.07.2014	12.08.2014	8.370	529.8	23.55

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Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	17.07.2014	14.08.2014	8.278	483.6	21.49
2	17.07.2014	14.08.2014	8.358	497.6	22.12
3	17.07.2014	14.08.2014	8.415	518.3	23.04

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